

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: **BOW LINE**

Agreement #: **30-076126**

2. Name of applicant: **Department of Natural Resources**

3. Address and phone number of applicant and contact person: **John Haddon, 713 Bowers Road, Ellensburg, WA 98926
(509) 925-8510**

4. Date checklist prepared: **09/13/2004**

5. Agency requesting checklist: **Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

- a. *Auction Date:* **Spring 2005**
b. *Planned contract end date (but may be extended):* **Fall 2006**
c. *Phasing:* **N/A**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

- a. *Site preparation:* **Distribute logging slash during the harvest to avoid concentrations and leave plantable spots.**
b. *Regeneration Method:* **Hand planting of Douglas-fir and ponderosa pine seedlings.**
c. *Vegetation Management:* **If needed herbicide spot treatment by ground application will follow Department procedures and guidelines. Needs will be assessed at completion of planting.**
d. *Thinning:* **Site to be assessed in 15-20 years to determine if precommercial thinning is needed.**

Roads: **1595' construction, 1750' reconstruction, 10 yds³ pit run rock applied, one 18"x32' CMP**

Rock Pits and/or Sale: **10 yds³ pit run removed from existing small rock pit located on State land adjacent to Unit #1 in NE¹/₄SE¹/₄ Section 20, Township 5 North, Range 11 East.**

Other:

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- ☐ 303 (d) – listed water body in WAU: ☐temp ☐sediment ☐completed TMDL (total maximum daily load):
- ☐Landscape plan:
- ☐Watershed analysis:
- ☐Interdisciplinary team (ID Team) report:
- ☒Road design plan:
- ☒Wildlife report: **SE Regional Biologist**
- ☐Geotechnical report:
- ☒Other specialist report(s): : **Cultural Resource Survey**
- ☐Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):
- ☐Rock pit plan:
- ☒Other: : **Forest Resource Plan: Environmental Impact Statement (EIS) adopted July 31, 1992 & DNR Habitat Conservation Plan (HCP), adopted January 30, 1997, HCP Ammendment #1 April 2004**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. **No.**

10. List any government approvals or permits that will be needed for your proposal, if known.

☐HPA ☒Burning permit ☐Shoreline permit ☒Incidental take permit ☒FPA # **2703100** ☐Other:

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. *Complete proposal description:* **Originally the proposal was planned for 498 acres. After on the ground review of the planned area, 425 acres were removed from the proposal due to available HCP habitat threshold acres in the landscape. Additional areas within the final units are described below. The Bow Line Timber Sale is a proposal to regenerate two timber stands. This proposal involves timber harvest, road construction, reconstruction, and maintenance on two harvest units totaling approximately 75 gross acres. Approximately 2.736 MMbf will be removed. Unit #1 is located at 2700’ elevation just above the Gilmer Valley in Section 20 of Township 5 North, Range 11 East. This unit is 43 acres. Unit #2 is located at 2300’ east of the Trout Lake Valley in Section 5 of Township 5 North, Range 11 East. This unit is 32 acres.**

The objectives of this harvest are to provide financial return to 01 (State Forest Board-Transfer) Trust and to return the stands to an early seral condition. Even-aged harvesting leaving 8-10 dominant and co-dominant trees/acre in both units is expected to accomplish this objective. Following harvest, a mixture of Douglas fir and ponderosa pine will be planted in both units.

The sale area lies within the Klickitat Planning Unit of the Department’s Habitat Conservation Plan (HCP). The Department of Natural Resources (DNR) Klickitat scattered block is designated as Desired Future Conditions (DFC) by the April 2004 HCP Amendment. Plant associations identified on the project area are in the Grand fir Series.

Unit #1 was created after a thorough reconnaissance of a 120-acre piece of state ownership. Stand types, harvesting methods, efficiency, and environmental protection delineated unit boundaries. Approximately 4 acres of oak woodland adjacent to and outside the unit boundary are designated as a Special Management Zone. There are approximately 200+ leave trees scattered throughout the sale area. Cable and ground based harvest methods will be utilized in this sale. Approximately 15 acres of the unit will be cable yarded. There will be 1595 feet of new road construction and 10 feet of reconstruction in this unit. The reconstruction includes the installation of one culvert. Soil types in this unit consist of a Cobbly loam that have a medium mass wasting potential and are considered highly erosive. Unit #2 was created after a thorough reconnaissance of a 40-acre piece of state ownership. Stand types, harvesting methods, efficiency, and environmental protection delineated unit boundaries. There will be approximately 340 leave trees left on site post harvest. Approximately three quarters of these leave trees were clumped in the Special Management Zone and the other quarter are scattered throughout the sale area. The clumped leave trees are contained in a 6-acre Special Management Zone (SMZ). This area contains a Type B wetland. A fifty-foot Wetland Management Zone (WMZ) was incorporated into the SMZ to provide wetland protection. There will be no timber harvested from the SMZ. This portion of the sale area has been treated as a special management zone due to the diversity in stand type and wetland protection.

b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.* **Unit #1 is a mix of Douglas fir, grand fir and ponderosa pine. It is approximately 75 years old. Unit #2 is a similar mix and is approximately 65 years old. The sale prescription is a regeneration or even-aged harvest including the necessary site preparation and vegetation management to reforest the units with the mix of tree species and stocking that will provide a healthy and diverse forest for the long-term.**

c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		1595	0.55	0
Reconstruction		1750		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	1			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under “SEPA Center.”)

- a. Legal description: **Parts of Section 5 and 20, Township 5 North, Range 11 East, W.M.**
- b. Distance and direction from nearest town (include road names):
Unit #1 is located 1.5 miles up the G-4000 which is accessed off the BZ-Glenwood Highway approximately five miles northeast of BZ corners. Unit #2 is located approximately 2 miles off the G-7600, which is accessed off the Trout Lake-Laurel road approximately five miles southeast of Trout Lake.
- c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under “SEPA Center.”)

WAU Name	WAU Acres	Proposal Acres
HOLMES CREEK	17732	32
GOTCHEN CREEK	38495	26
BZ	12020	7

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under “SEPA Center” for a broader landscape perspective.)
The DNR manages 10% of the land in the Holmes Creek WAU, 15% of the land in the Gotchen WAU, and 19% of the land in the BZ WAU.

In the Holmes Creek WAU, according to the DNR Forest Practice Application Review System (FPARS) database as of 8/16/04, in the past seven years there have been 4,346 acres harvested, or 25% of the WAU, across all ownerships. Approximately ½ of the acres were even aged harvests. On DNR, 69 acres were evenage harvested and 123 acres were unevenage harvested. 82% of the Holmes Creek WAU is privately owned and any conservative speculation as to future activities would have to be in line with the recent past harvesting activities.

In the Gotchen Creek WAU, according to the DNR Forest Practice Application Review System (FPARS) database as of 8/16/04, in the past seven years there have been 3,445 acres harvested, or 9% of the WAU, across all ownerships. Approximately 70% of the acres harvested were even aged harvests. On DNR, 317 acres were evenage harvested and 535 acres were unevenage harvested. 49% of the land in the Gotchen WAU is federally owned and any conservative speculation as to future activities would have to be in line with the recent past harvesting activities.

In the BZ WAU, in the past seven years there have been 2,400 acres harvested, or 20% of the WAU, across all ownerships with none on DNR. Approximately 60% of the acres harvested, were uneven aged harvests. 81% of the BZ WAU is privately owned and any conservative speculation as to future activities would have to be in line with the recent past harvesting activities.

Thus this proposal, by itself, or in addition to the proposed and/or completed activities within these three WAU’s should not result in a cumulative change in the environment.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (check one):
☐ Flat, ☒ Rolling, ☐ Hilly, ☐ Steep Slopes, ☐ Mountainous, ☐ Other:
Unit #1 is in an area with steep slopes. Unit #2 is in area that is relatively flat.
- 1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).
Unit #1 is in the Wind-White Salmon Water Resource Inventory Area (WRIA #29) and in the Klickitat Water Resource Inventory Area (WRIA #30). Unit #1 is located in three Watershed Administrative Units. They include the Gotchen Creek Watershed Administrative Unit (WAU #290103), in the Holmes Creek Watershed Administrative Unit (WAU #300323) and in the BZ Watershed Administrative Unit (WAU #290204).

The Gotchen Creek WAU's topography is rolling, with elevations ranging from 1,060 to 7,879 feet with a mean elevation of 3,176 feet. Annual precipitation varies from 30 - 110 inches per year depending on elevation and aspect. Douglas fir, ponderosa pine, Oregon oak, and grand fir are the primary timber species.

The BZ WAU's topography is rolling, with elevations ranging from 427 to 2,847 feet with a mean elevation of 1,542 feet. Annual precipitation varies from 45 -50 inches per year depending on elevation and aspect. Douglas fir, ponderosa pine, Oregon oak, and grand fir are the primary timber species.

Unit #2 is in the Klickitat Water Resource Inventory Area (WRIA #30). It is in the Holmes Creek Watershed Administrative Unit (WAU #300323). Holmes Creek flows into the Outlet Creek and then to the Klickitat River. The Holmes Creek WAU's topography is rolling, with elevations ranging from 1,807 to 3,500 feet with a mean elevation of 2,260 feet. Annual precipitation varies from 35 - 45 inches per year depending on elevation and aspect. Douglas fir, ponderosa pine, Oregon oak, and grand fir are the primary timber species.
- 2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).
Unit #1 is located in three different Watershed Administrative Units. Unit #1 is at 2700’ elevation with rolling topography. Unit #2 is well described in the general description of the Holmes Creek WAU.
- b. What is the steepest slope on the site (approximate percent slope)?
Unit #1 has slopes from 50-60 % on approximately 30 % of the unit.
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may*

vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
6227	LOAM	5-30	44	INSIGNIFIC'T	MEDIUM
1343	COBBLY LOAM	30-75	15	MEDIUM	HIGH
6229	COBBLY LOAM	30-65	11	MEDIUM	HIGH
5738	OREOKE-BEEZEE-COMPLEX	30-75	2	No Data	No Data
4038	JEBE-ROCK OUTCROP-RUBBLE LAND-COMPLEX	50-90	1	No Data	No Data
0716	COBBLY LOAM	30-65	1	MEDIUM	HIGH
6228	LOAM	30-50	1	LOW	HIGH

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
- 1)

Surface indications:

There is one small inner gorge located in the western portion of the Type 5 draw of Unit #1. The Type 5 draw shows little water flow and a poorly defined channel. At the initiation of the inner gorge portion of the draw, the soils have been cut down to incise the channel.
- 2)

Is there evidence of natural slope failures in the sub-basin(s)?

☐No

☒Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

A shallow landslide occurred at the top of Wieburg Creek and descended the steep drainage to the bottom. It was associated with a rain on snow event that occurred in 1996. Although this failure is in the sub-basin, it is approximately five miles south west of unit one. The failure at Wieberg Creek is a very steep inner gorge. The soil type at the failure site is Kingtain-rock outcrop complex, a highly erodible and unstable gravelly colluvial soil. The failure site is a steep (>70%) inner gorge with a northeast aspect. The slope stability model shows a high likelihood of failure if disturbed. Steep inner gorges with northeast aspects can accumulate a heavy snow load that is slow to melt. A warm and heavy spring rainfall event can trigger a slope failure as it did in this case in 1996.
- 3)

Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?

☒No

☐Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

Associated management activity:
- 4)

Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?

☒No

☐Yes, describe similarities between the conditions and activities on these sites:

This site is different than the Wieberg Creek site in that it is west facing, at a lower elevation and on a different soil type.
- 5)

Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal. .

There is one small inner gorge located in the western portion of the Type 5 draw of Unit #1. There will be no trees harvested from this area. All merchantable trees 8” and larger contained in this draw are marked with blue paint to remain on site post harvest. This area is located in a cable-based portion of the timber sale. The surrounding timber that is to be removed will be directionally felled away from this draw and cable yarded in such a way as to minimize any impacts to this draw. This inner gorge is located adjacent to the property boundary. The adjoining landowner has clear cut their stand. During the site visit with the DNR geologist, there was some discussion that wind throw could pose a potential problem. It was decided that leaving these trees in this draw was the best course of action to take to provide the protection for this feature.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads:0.55 Approx. acreage new landings:1.0 Fill source:N/A
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **Minor erosion may occur on disturbed surfaces during seasonal snowmelt and spring thaw. Erosion will be minimized by the measures listed in h. below.**
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
Less than one percent will be covered with impervious surfaces.
- h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.) **Use of existing roads and skid trails and seasonal haul restrictions will minimize runoff and erosion. Some of the reconstruction work will improve drainage. The timber surrounding the inner gorge that is to be removed will be directionally felled away from this draw and cable yarded in such a way as to minimize any impacts to this draw.**

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known. **Minor amounts of exhaust and road dust will be created during the operation. Slash burning smoke would occur if any landing piles are burned, but only for short durations.**
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **No.**
- c. Proposed measures to reduce or control emissions or other impacts to air, if any: **Any slash burning will be done following the DNR Smoke Management rules.**

3. Water

a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See timber sale map and forest practice base maps.)
Unit #1 has a Type 5 draw in it. This Type 5 contains a small inner gorge. There is a poorly defined channel that indicates minimal delivery down stream and seasonal flows to the White Salmon River. Unit #2 has a Type 5 and a Type B wetland. The wetland goes underground as it intersects the Type 5. There is a poorly defined channel that indicates minimal delivery down stream and seasonal flows to Holmes Creek.
a) Downstream water bodies:
The White Salmon River is downstream of unit one. Holmes creek is downstream of unit two.
b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Type B Wetland	Type B Wetland	1	50 foot
Unnamed	Type 5	2	30 foot ELZ

- c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers. **Unit #2 has clumped leave trees that are contained in a 6-acre Special Management Zone (SMZ). This area contains a Type B wetland. A fifty-foot Wetland Management Zone (WMZ) was incorporated into the SMZ to provide wetland protection. There will be no timber harvested from the SMZ. This portion of the sale area was treated with special management due to diversity in stand type and wetland protection. The Type 5 draws will be protected with an Equipment Limitation Zone (ELZ) of thirty feet.**
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐No ☒Yes (See RMZ/WMZ table above and timber sale map.)
Description (include culverts): **There is one small inner gorge located in the western portion of the Type 5 draw of Unit #1. There will be no trees harvested from this area. All merchantable trees 8” and larger contained in this draw are marked with blue paint to remain on site post harvest. This area is located in a cable-based portion of the timber sale. The surrounding timber that is to be removed will be directionally felled away from this draw and cable yarded in such a way as to minimize any impacts to this draw. This inner gorge is located adjacent to the property boundary. The adjoining landowner has clear cut their stand. There was some discussion that wind throw could pose a potential problem. It was decided that leaving these trees in this draw was the best course of action to take to provide the protection for this feature.**

In Unit #2 the clumped leave trees are contained in a 6-acre Special Management Zone. This area contains a Type B wetland. A fifty-foot Wetland Management Zone (WMZ) was incorporated into the SMZ to provide wetland protection. There will be no timber harvested from the SMZ. This portion of the sale area was treated with special management due to the variation in stand type and wetland protection. There will be one road crossing through this SMZ to facilitate timber harvest.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None.
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
☒No ☐Yes, description:
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒No ☐Yes, describe location:
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒No ☐Yes, type and volume:
- 7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water? **Steep slopes with erodible soils and inner gorges are susceptible to soil movement within these sub-basins. There is a potential delivery to surface waters if disturbed soils are in close proximity to typed waters.**
- 8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☐No ☒Yes, describe changes and possible causes: **There is one small inner gorge located in the western portion of the Type 5 draw of Unit #1. The soil type is Chapot and is highly erosive.**
- 9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☐No ☒Yes, explain: **The potential exists to affect water quality but there will be no trees harvested from this area. All merchantable trees 8” and larger contained in this draw are marked with blue paint to remain on site post harvest. This area is located in a cable-based portion of the timber sale. The surrounding timber that is to be removed will be directionally felled away from this draw and cable yarded in such a way as to minimize any impacts to this draw.**

- 10) What are the approximate road miles per square mile in the WAU and sub-basin(s)? **Holmes WAU: 4.5 miles per square miles, Gothen WAU: 3.8 miles per square mile, BZ WAU: 2.9 miles per square mile**
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒No ☐Yes, describe:
- 11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☐No ☒Yes, approximate percent of WAU in significant ROS zone.
Approximate percent of sub-basin(s): **85% Holmes Creek WAU, 45% Gothen Creek WAU, 32% BZ WAU**
- 12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
60% Holmes Creek WAU, 72% Gothen Creek WAU, 75% BZ WAU
- 13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐No ☒Yes, describe observations: **Peak flows have caused changes in the Type 5 draw in Unit #1 by creating the inner gorge. The peak flows have caused some down cutting to occur.**
- 14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact. **This proposal will not significantly alter the peak flow impacts in the WAU.**
- 15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒No ☐Yes, possible impacts:
- 16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts. **None needed.**

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known. **No.**
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. **N/A**
- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒No ☐Yes, describe:
- a) Note protection measures, if any.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Road-related collection and runoff will be diverted to the forest floor and will not directly enter surface waters.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
No.
- a) Note protection measures, if any.
None.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)
Temporary roads and skid trails will be water barred upon completion.

4. Plants

a. Check or circle types of vegetation found on the site:

- ☒deciduous tree: ☒alder, ☒maple, ☒aspen, ☒cottonwood, ☐western larch, ☐birch, ☐other
☒evergreen tree: ☒Douglas fir, ☒grand fir, ☐Pacific silver fir, ☒ponderosa pine, ☐lodgepole pine,
☐western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☐Sitka spruce,
☐red cedar, ☐yellow cedar, ☐other:
☒shrubs: ☐huckleberry, ☐salmonberry, ☐salal, ☒other: vine maple
☐grass
☐pasture
☐crop or grain
☒wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☒skunk cabbage, ☐devil's club, ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☒plant communities of concern: **Type B wetland in Unit #2**

- b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)**This is a proposal to harvest two timber stands by removing approximately 2.786 MMbf .**

- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")
Unit #1 is a warm grand fir site. The dominant species are Douglas fir, grand fir and small amounts of ponderosa pine. This stand is approximately 75 years old. Unit #2 is similar in most respects except it is approximately 65 years old.
- 2) Retention tree plan: **This is a proposal to utilize both clumped and scattered leave tree strategies leaving an average of 8-10 dominant and co-dominant trees/acre in both units.**
- c. List threatened or endangered *plant* species known to be on or near the site. **None**
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: **None.**

5. Animal

- a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☐other:
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☐other:
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☒oak woodlands, ☐balds, ☐mineral springs
- b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

Unit #1 is located inside spotted owl circles #690 (Gilmer Creek, status 1) and #883 (Hangman Creek, status 4). These circles are not listed in Amendment No. 1, since they are located on private lands. Unit #1 is located on the outer western edge of spotted owl site #690, and does not encompass any core areas of this circle. The DNR amendment to the HCP does not include these owls on the list of occupied nest sites plans.
- c. Is the site part of a migration route? If so, explain. **Yes.**
☒Pacific flyway ☐Other migration route: Explain if any boxes checked: **The site is within the Pacificflyway, however is not used by migratory waterfowl.**
- d. Proposed measures to preserve or enhance wildlife, if any:

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
Species /Habitat: **Snag dependent species** Protection Measures: **Protect significant snags**

Species /Habitat: **Downed wood species** Protection Measures: **Retain existing downed wood and meet or exceed minimum Forest Practices standards.**

Species /Habitat: **Oak Woodland habitat** Protection Measures: **Bounded out of timber sale.**

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. **None.**
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **No.**
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **N/A**

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe special emergency services that might be required. **The area is covered by forest patrol assessment for DNR fire suppression needs.**

2) Proposed measures to reduce or control environmental health hazards, if any:
Logging slash will be piled and burn in accordance with DNR policies.
- b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **None.**

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
Logging operations will create noise in the immediate area during daylight hours.

3) Proposed measures to reduce or control noise impacts, if any: **None.**

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.) **Timber production and grazing**

- b. Has the site been used for agriculture? If so, describe.
Permit range cattle grazing.
- c. Describe any structures on the site. **None.**
- d. Will any structures be demolished? If so, what? **No.**
- e. What is the current zoning classification of the site? **Forest Resource.**
- f. What is the current comprehensive plan designation of the site? **Agriculture/Forestry**
- g. If applicable, what is the current shoreline master program designation of the site? **N/A**
- h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify. **No.**
- i. Approximately how many people would reside or work in the completed project? **None.**
- j. Approximately how many people would the completed project displace? **None.**
- k. Proposed measures to avoid or reduce displacement impacts, if any: **N/A**
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **None.**

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.
- c. Proposed measures to reduce or control housing impacts, if any: **None.**

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed? **N/A**
- b. What views in the immediate vicinity would be altered or obstructed?
 - 1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☒ **No** ☐ **Yes, viewing location:**
 - 2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☒ **No** ☐ **Yes, scenic corridor name:**
 - 3) *How will this proposal affect any views described in 1) or 2) above?* **N/A**
- c. Proposed measures to reduce or control aesthetic impacts, if any: **None.**

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **Does not apply.**
- b. Could light or glare from the finished project be a safety hazard or interfere with views? **Does not apply.**
- c. What existing off-site sources of light or glare may affect your proposal? **Does not apply.**
- d. Proposed measures to reduce or control light and glare impacts, if any: **None.**

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? **Hiking, hunting, horseback riding.**
- b. Would the proposed project displace any existing recreational uses? If so, describe: **No.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **None.**

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe. **No.**
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. **A survey of the site by the DNR’s cultural resource technician did discover three historical bottles. An isolate report was created and submitted to the DNR Archeologist.**
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

Should any cultural resources be identified within the sale boundaries during timber harvest, work will cease in that area, a professional archaeologist will be notified immediately, and a site protection plan will be developed.

14. **Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. **BZ-Glenwood Highway to Highway 141; Trout Lake-Laurel road to Trout Lake-Glenwood Highway to Warner road to Sunnyside road to Highway 141**
 - 1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?* **No.**
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No.
- c. How many parking spaces would the completed project have? How many would the project eliminate?
None.
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). **Yes, for this proposal 1595 feet of new road construction and 1750 feet of reconstruction of forest roads will be required.**
 - 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*
It does not impact the overall transportation system.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No.
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. **10-20 log truck loads per day is the likely volume and June-September of 2005 or 2006 is the period.**
- g. Proposed measures to reduce or control transportation impacts, if any: **Timber haul shall not be permitted between October 1ST and May 31ST unless authorized in writing by the contract administrator.**

15. **Public Services**

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe. **The operation may temporarily increase the risk of wildfire, however the operator will be required to have fire suppression equipment on site when operating during the fire season.**
- b. Proposed measures to reduce or control direct impacts on public services, if any.
None.

16. **Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other. **None.**
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed. **None.**

C. **SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by:	_____	Date:	_____
	STEVEN CROWE, District Forester		
Reviewed by:	_____	Date:	_____
	PETER T. STOCKS, District Manager		
	_____	Date:	_____
	JOHN HADDON, Management Forester		
Approved by:	_____	Date:	_____
	GEORGE B. SHELTON, Assistant Region Manager		